

Title (en)
INTRAOCULAR LENS WITH PHOTSENSITIZER AND METHOD FOR MODIFYING THE REFRACTIVE INDEX OF THE LENS

Title (de)
INTRAOKULARLINSE MIT PHOTSENSIBILISATOR UND VERFAHREN ZUR MODIFIZIERUNG DES BRECHUNGSINDEX DER LINSE

Title (fr)
LENTILLE INTRAOCULAIRE À PHOTSENSIBILISATEUR ET PROCÉDÉ DESTINÉ À MODIFIER L'INDICE DE RÉFRACTION DE LA LENTILLE

Publication
EP 2326285 B1 20120215 (EN)

Application
EP 09751282 A 20090518

Priority

- US 2009044335 W 20090518
- US 5422508 P 20080519
- US 38089209 A 20090304

Abstract (en)
[origin: US2009287306A1] A method for modifying the refractive index of an optical, hydrogel polymeric material. The method comprises irradiating predetermined regions of an optical, polymeric material with a laser to form refractive structures. To facilitate the formation of the refractive structures the optical, hydrogel polymeric material comprises a photosensitizer. The presence of the photosensitizer permits one to set a scan rate to a value that is at least fifty times greater than a scan rate without the photosensitizer in the material, yet provides similar refractive structures in terms of the observed change in refractive index. Alternatively, the photosensitizer in the polymeric material permits one to set an average laser power to a value that is at least two times less than an average laser power without the photosensitizer in the material, yet provide similar refractive structures.

IPC 8 full level
A61F 2/16 (2006.01)

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A61F 2/14 (2013.01 - KR); **A61F 2/1451** (2015.04 - EP); **A61F 2/16** (2013.01 - KR); **A61F 2/1627** (2013.01 - EP US); **A61F 9/00804** (2013.01 - US); **A61L 27/18** (2013.01 - KR); **A61L 27/50** (2013.01 - EP US); **A61L 27/52** (2013.01 - EP US); **B29C 71/04** (2013.01 - KR); **B29D 11/00** (2013.01 - KR); **B29D 11/00009** (2013.01 - US); **B29D 11/00461** (2013.01 - EP); **B29D 11/023** (2013.01 - EP); **G02B 1/12** (2013.01 - KR); **A61F 2/1635** (2013.01 - EP US); **A61L 2430/16** (2013.01 - EP US); **G02C 2202/14** (2013.01 - EP US)

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